IN THE CLAIMS

Please cancel claims 24-26 and 32-43 and insert new claims 44 to 51 as follows:

44. (new) A polyamine dimer formed of two polyamine units, each having at least three amino groups including an intermediate amino group, said units being attached to each other by alkylation through a linker which is a chemical entity that is covalently attached to both said intermediate amino groups.

45. (new) A synthetic polyamine dimer as defined in claim 44 having the following structure (2):

$$\begin{array}{c|c} R_1HN & C & R_2 & R_2 \\ \hline R_1HN & C & WH & C \\ \hline R_2 & L & R_2 & R_2 \\ \hline R_1HN & C & WH & C \\ \hline R_2 & R_2 & R_2 \\ \hline R_1HN & C & WH & C \\ \hline R_2 & R_2 & NHR_1 \\ \hline R_2 & R_2 & NHR_1 \\ \hline R_2 & R_2 & NHR_1 \\ \hline \end{array}$$

Wherein R_1 is H, methyl, ethyl, n-propyl or isopropyl, R_2 is H or methyl, x is greater than two and less than five $(2 \le x \le 5)$, w is greater than 2 and less than five $(2 \le x \le 5)$ and L is a linker as defined in claim 44.

46. (new) The synthetic polyamine dimer as defined in claim 45, wherein x=3, R_1 is a hydrogen atom R_2 is a methyl (CH₃) group for the carbon atom located next to each NH -R group and is a hydrogen atom for all those carbons and w=4.

Ser. No. 09/529,319

Agent's Ref. 6013-114us

47. (new) A synthetic polyamine dimer as defined in claim 44, having the following structure (3):

$$\begin{array}{c|c} R_1HN & \begin{pmatrix} R_2 & & R_2 \\ C & & & C \\ R_2 & & & R_2 \end{pmatrix} & NHR_1 \\ \hline R_1HN & \begin{pmatrix} C & & & \\ C & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & & \\ & & & \\ & & & \\ & & & & \\ & &$$

wherein R_1 and R_2 are as defined in claim 45, where x and y are greater than 2 and smaller than 5 (2 < x < 5, 2 < y < 5), where the sum of x and y is greater than 5 and smaller than 9 (5 < (x + y) < 9) and where L is a linker as defined in claim 44.

- 48. (new) The synthetic polyamine dimmer as defined in claim 47, wherein the chemical linker comprises an alkyl, an aryl and/or a heterocyclic group.
- 49. (new) The synthetic polyamine dimer as defined in claim 47, wherein R_1 is H, x is 3 or 4, y is 3 or 4.
- 50. (new) The synthetic polyamine dimer as defined in claim 47, wherein the linker L is an aliphatic carbon chain having a structure $(CH2)_n$ -, where n is greater than 2 and less than 10.
- 51, (new) The synthetic polyamine dimer as defined in claim 47, when L is xylene.

Ser. No. 09/529,319

Agent's Ref. 6013-114us